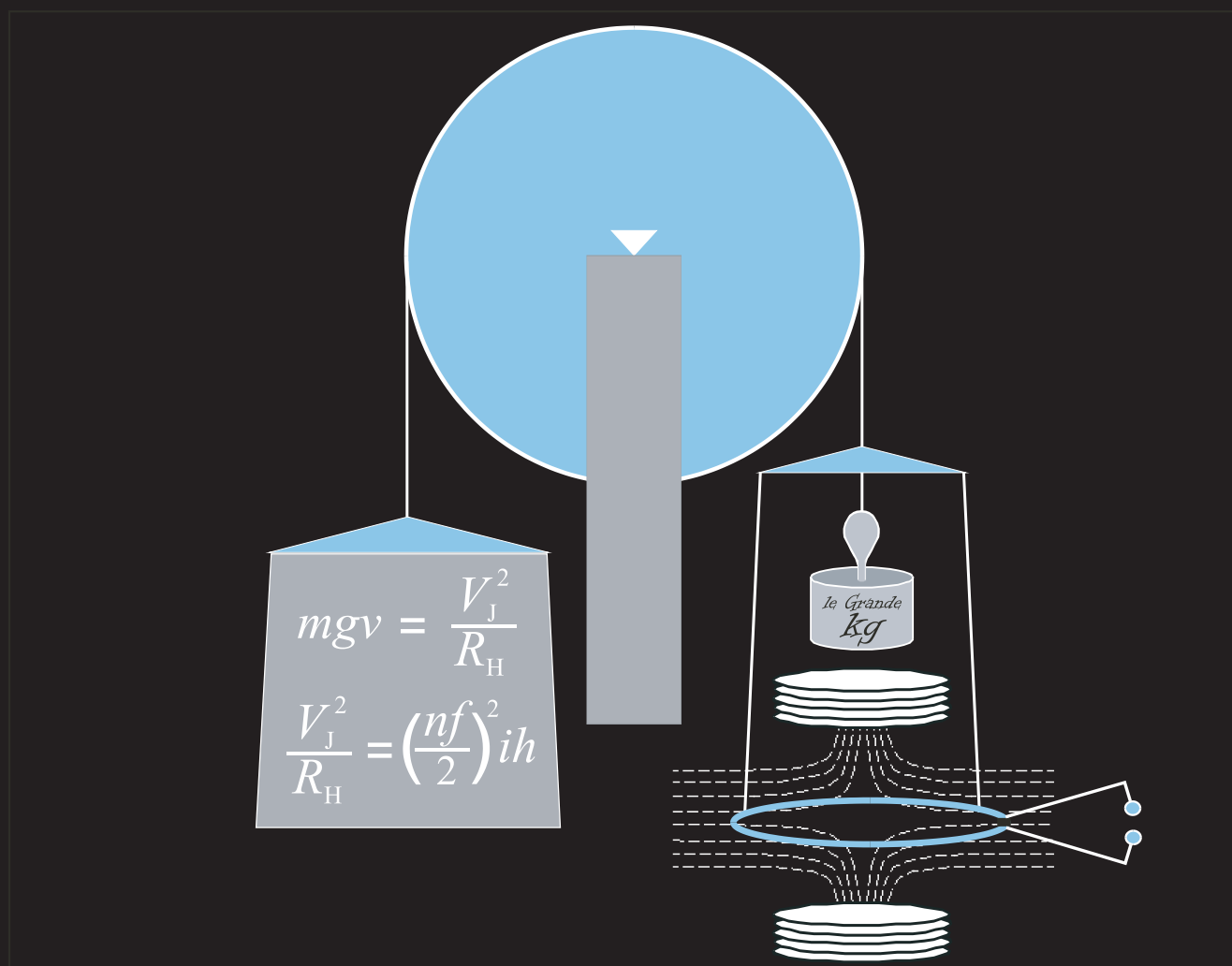


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- Information Services and Computing
- Software Diagnostics and Conformance Testing
- Statistical Engineering

¹ At Boulder, CO 80303.

² Some elements at Boulder, CO.

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Cover: The cover illustration is a symbolic representation of the NIST watt balance. The equations show the link between the International Prototype of the Kilogram (le Grande kg) artifact and the quantum-mechanical Planck constant, h . These equations provide a possible path for the redefinition of the base unit of mass (see the article on p. 627). Cover illustration by C. Carey.

The *Journal of Research of the National Institute of Standards and Technology*, the flagship periodic publication of the national metrology institute of the United States, features advances in metrology and related fields of physical science, engineering, applied mathematics, statistics, biotechnology, and information technology that reflect the scientific and technical programs of the Institute. The *Journal* publishes papers on instrumentation for making accurate measurements, mathematical models of physical phenomena, including computational models, critical data, calibration techniques, well-characterized reference materials, and quality assurance programs that report the results of current NIST work in these areas. Occasionally, a Special Issue of the *Journal* is devoted to papers on a single topic. Also appearing on occasion are review articles and reports on conferences and workshops sponsored in whole or in part by NIST.

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Contents

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Articles

Hysteresis and Related Error Mechanisms in the NIST Watt Balance Experiment	Joshua P. Schwarz, Ruimin Liu, David B. Newell, Richard L. Steiner, Edwin R. Williams, Douglas Smith, Ali Erdemir, and John Woodford	627
Comparison of Two Cryogenic Radiometers at NIST	Jeanne M. Houston and David J. Livigni	641
Sources of Error in UV Radiation Measurements	Thomas C. Larason and Christopher L. Cromer	649
Hysteresis in Transport Critical-Current Measurements of Oxide Superconductors	L. F. Goodrich and T. C. Stauffer	657
Powder X-Ray Reference Patterns of $\text{Sr}_2\text{RGaCu}_2\text{O}_y$ (R = Pr, Nd, Sm, Eu, Gd, Dy, Ho, Er, Tm, and Y)	W. Wong-Ng, J. A. Kaduk, I. Levin, W. Greenwood, and J. Dillingham	691
Compressing Spin-Polarized ^3He With a Modified Diaphragm Pump	T. R. Gentile, D. R. Rich, A. K. Thompson, W. M. Snow, and G. L. Jones	709
Treasure of the Past VIII: Molecular Basis of Flame Inhibition	J. W. Hastie	731

News Briefs

GENERAL DEVELOPMENTS	753
Wanted: Measurements With Good References New NIST Practice Guide on Rockwell Hardness Testing Available	
Want Skills in Neutron Spectroscopy? Go to Summer School! Semiconductor Labs Put New NIST Software Through Its Paces New Publication Showcases Key NIST Research Achievements	754
Paper Describes New System for Detecting Concealed Weapons New International Standards Activity in Polymer Mass Spectrometry	755
NIST Says "More Attention Must Be Paid to Repair Welds" NIST Contributes to New ANSI Standard for Financial Services Industry NIST Researchers Lead Development of Standards for Wireless Personal Area Networks	756

NIST Recommended Practice Guide “Surges Happen!” Explains Protection of Consumer Appliances A Web-Based Facility for Evaluating Peak-Fitting Methods in X-Ray Photoelectron Spectroscopy	757
Systematic Uncertainty Identified in Measurements of Silicon Dioxide Film Thicknesses by X-Ray Photoelectron Spectroscopy Interactive Website for Analyzing Mitochondrial DNA	758
Non-Destructive Measurement of Magnetostriction in Thin Films Small-Angle Neutron Scattering Uniquely Probes Gene Regulatory Protein/DNA Complexes	759
Analysis of Dental Composites by Near Infrared Spectroscopy NIST Publishes Open Source Software Toolkit For XML Application Integration Cooperative Research Determines Power Quality Effects on Machine Tools	760
New Web Resources for Dimensional Metrology New Fitting Algorithm for Shape-Sensitive Linewidth Metrology Dielectric Behavior of Materials for Wireless Communications Predicted From First Principles	761
New High-Speed Measurement Collaboration New Law Enforcement Standard for Intercepts on Digital Networks Superconductor With High Niobium Architecture Has Unexpectedly Good Electromechanical Properties	762
Magnetic Substrates Reduce Performance of Y-Bu-Cu-O Coated Superconductors NIST Co-Sponsors Pervasive Computing 2001 Conference NIST and Partners Help Blaze the Path to Metatopia	763
New Online Newsletter Links Researchers and Firefighters NIST Launches Series of Guides to EU Directives	764
November Conference Tackles Text Retrieval Systems Fall Conference to Showcase New Cases for Charters of Freedom NIST Forms Team to Tackle Inspection Software Problems	765
Work Well Under Way on World’s Premier Measurement Lab Radiometric Characterization Performed at NIST Improves Accuracy of the Marine Optical Spectrograph NIST and NFPA Profile Smoke Toxicity Hazard	766
NIST Team Develops Screening Tool for New Fire Suppressants Work by NIST Researcher Suggests Performance Breakthrough in Speaker Recognition	767
NIST Publishes Special Publication 250-58: <i>Calibration of X-Ray and Gamma-Ray Measuring Instruments</i> Spontaneous Coherent Microwave Emission at SURF III Single-Crystal Critical Dimension Reference Materials Delivered by NIST Researchers to International SEMATECH	768
NIST Demonstrates Remote Operation of 10 V Josephson Voltage Standard System Constant Voltage Steps in Josephson Junction Series Arrays at 10 K Seven-Times Resolution Improvement in Narrowband Polarization-Mode Dispersion	769

Uniform Ti-Barrier Josephson Junction Arrays for AC Josephson Voltage Standard Resonating Torque Microbalance Developed for <i>In Situ</i> Measurements of Ferromagnetic Films With Sub-Monolayer Sensitivity Directory of Private-Sector Product Certification Program Updated	770
Novel Combinatorial Methods for Inorganic Thin Films Elastic Characterization of Anisotropic Thin Films Using SAW Dispersion	771
Combinatorial Characterization of Block Copolymer Film Morphology Biomimetic Membrane Studies Using Neutron Reflectometry A Software Tool for Generation of MONSEL Libraries	772
<i>Proceedings of the Workshop on Measurement Traceability for Clinical Laboratory Testing and In Vitro Diagnostic Test Systems</i> NIST Co-Sponsors IT Accessibility 2001 Conference NIST Hosts Large Vocabulary Conversational Speech Recognition Workshop	773
NIST Collaborates With NEMI on Standards Project for Lead-Free Solders	774
STANDARD REFERENCE MATERIALS New Absolute Magnetic Moment Standard Reference Material for the Recording Industry	774
